

over either Powers et al. in view of Leonard.

As amended, claim 1 recites an earplug having a foam body free of detectable material and a detectable insert encapsulated within the foam body. Applicant is unclear whether the Examiner is still using the Carr reference in rejecting the claims; however, the Carr reference does not teach or suggest the present invention as it only teaches molding a plug with a hole formed therein. The hole is formed to assist in the demolding process and to create a comfort cavity. Carr mentions no other benefits to providing the hole in the foam body. Leonard teaches taking a metal ball, inserting it into a channel formed in the stem of the earplug, and then placing a cord into the channel to secure the metal ball therein.

The Applicant has amended claim 1 to recite that the foam body encapsulates and completely surrounds the detectable insert. Accordingly, Applicant respectfully submits that the Leonard reference fails to teach or suggest disposing a detectable insert within a foam body which encapsulates and completely surrounds the detectable insert. The detectable part of the Leonard invention is retained within a channel formed within the earplug and preferably the channel is packed with a cord to secure the metal ball. While, the Examiner properly notes that the metal ball is designed to be retained within the earplug even if the cord detaches, the metal ball is retained in an open-ended channel with contoured walls of the channel serving to retain the metal ball. Leonard requires that the earplug have a preformed and open-ended channel because the channel receives the cord and more importantly, the channel provides the means for inserting the metal ball into the earplug. Thus, without having an open channel, the metal ball could not be inserted into the earplug. There is no teaching whatsoever in the Leonard reference of encapsulating the detectable insert with the foam body so that the foam body completely

surrounds the detectable insert.

In addition, the Powers et al. reference in combination with the Leonard et al. reference does not teach or suggest the present invention. The foam body in Powers et al. does not encapsulate any member at all but rather the foam body pinches the cord to retain the cord in place. The cord extends within the foam body and is not encapsulated and certainly is not completely surrounded by the foam body as recited in amended claim 1. Applicant respectfully submits that Powers et al. therefore does not contemplate inserting an object into the foam body to fully encapsulate and surround the object within the earplug foam body. As previously mentioned, the foam body in Powers et al. serves to pinch and retain the cord. It does not completely surround this object (the cord) as this would be impossible. For at least these reasons, there is no teaching or suggestion of providing a foam earplug in which the foam body encapsulates and completely surrounds the detectable insert. In view of the foregoing, Applicant respectfully requests reconsideration and allowance of claim 1.

Claims 2-6 and 22-23 variably depend on what should now be an allowable independent claim 1 and therefore the rejection of these claims should be withdrawn and the claims passed to issue.

Claim 7 teaches a method of manufacturing an earplug comprising forming a channel in the foam body and placing a detectable insert in the channel, and allowing the foam body to encapsulate the detectable insert so that the foam body completely surrounds the detectable insert. For reasons stated previously with reference to claim 1, the references fail to teach or suggest Applicant's claimed method. More specifically, Applicant's teaching of forming a channel, disposing the insert therein, and allowing the foam to encapsulate the insert so that the

foam body completely surrounds the detectable insert is not taught or suggested by these references. The channel formed in the stem of Leonard does not permit the metal ball to be completely surrounded by the foam body but rather is a more rigid channel designed to receive the metal ball and the cord. The Powers et al. reference does not teach forming a channel for the purpose of inserting an object which will then be encapsulated and completely surrounded by the foam body but rather the channel formed in Powers et al. is meant to receive and pinch the cord so as to secure the cord to the earplug. The present invention teaches inserting an object into the foam body and then having the foam body completely surround the object. For at least these reasons, claim 7 should be allowed. Reconsideration and allowance are respectfully requested.

Claims 8-15 should now be allowable as variably depending from what should now be an allowable independent claim 7.

Claim 16 teaches a method of manufacturing an earplug wherein the detectable insert is projected into the foam body and the foam body is allowed to encapsulate the insert so that the detectable insert is completely surrounded by the foam body. All three references are silent of projecting a detectable insert into a foam body and then allowing the foam body to encapsulate the detectable insert so that the insert is completely surrounded by the foam body. The Examiner has failed to provide any specific reasoning for rejecting this claim. Projecting the metal ball of Leonard would serve no purpose because the metal ball is carefully placed in the rigid channel and then capped by the cord. The projecting of the metal ball is not necessary because the foam body of Leonard does not encapsulate the metal ball. As previously mentioned, neither Carr nor Powers teach using detectable inserts and furthermore do not teach or suggest the projection of a body into a foam body to cause encapsulation of the insert. In addition and for the reasons stated

with reference to claims 1 and 7, amended claim 16 recites that the detectable insert is completely surrounded by the foam body. For at least these reasons, Applicant requests that claim 16 be passed to issue.

Claims 18-21 should be allowable as variably depending on what should be allowable independent claim 17.

Accordingly, as the references cited in the Office Action do not render obvious that which the Applicant deems to be the invention, it is respectfully requested that claims 1-23 be passed to issue. The remaining references, although not cited as prior art, were found to be even less relevant and therefore no further discussion is required.

It is believed that the foregoing remarks fully comply with the Office Action.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicant's Attorneys.

Respectfully submitted,  
ROBERT N. FALCO  
CANTOR COLBURN LLP

Applicant's Attorneys

By: 

Edward J. Ellis  
Registration No. 40,389  
Customer No. 23413

Date: April 3, 2000  
Address: 55 Griffin Road South, Bloomfield, Connecticut 06002  
Telephone: (860) 286-2929